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Application of Knowledge Management in Organizational Management

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Abstract: In fact, any task that uses and applies knowledge can benefit from the structure of knowledge management, and that covers most managerial and professional activities. Therefore, like other management 'fads' before, many existing business practices (such as information management and intelligence gathering) are coming under the knowledge management umbrella. Similarly, information systems solutions, such as document management and data warehousing are being similarly relabeled.

Structurally, the use and sharing of knowledge must be aligned with all of the factors described in the paper. The development and application of knowledge must be relevant and in context to the business direction and the stakeholders needs. Optimum knowledge application, sharing, and flow is only delivered as part of the business processes of the organization. The objectives and measures of each must be common. Most importantly, knowledge growth and use must be specifically tied to the individual and team objective setting, incentive and reward mechanisms of the organization.

Keywords: Knowledge Management, Organization, Innovation Cycle

I. Introduction

Today knowledge is accepted as an important basis for competitive advantages and many organizations are beginning to establish knowledge management systems. Within the last few years many organization tried to design a suitable knowledge management system and many of them were successful.

Managing an organization's knowledge is the latest pursuit of those seeking competitive advantage. The interest in knowledge management has surged during the last few years, with a growing number of researches publications, conferences and investment in knowledge management initiatives.(skyrme,2000)

There are numerous definitions of knowledge management. Knowledge management or KM is an integrated ,systematic approach to recognize, manage and share all of the department's information resources, including databases, documents, strategies, policies and procedures .In this process management creates a new environment where knowledge and experience can easily be shared and also enables information and knowto emerge and

flow to the right people at the right time so they can act more efficiently and effectively.(smith,2001) Briefly KM is "the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation, in pursuit of organizational objectives."(Skyrme.2000)

There are many types and forms of knowledge e.g. facts, know-how, specific skills, procedural knowledge etc. A common interpretation is that of a knowledge hierarchy that goes from data (facts and figures) to information (data with context) to knowledge (information with meaning) to wisdom or intelligence (knowledge with insight). (see figure 1)

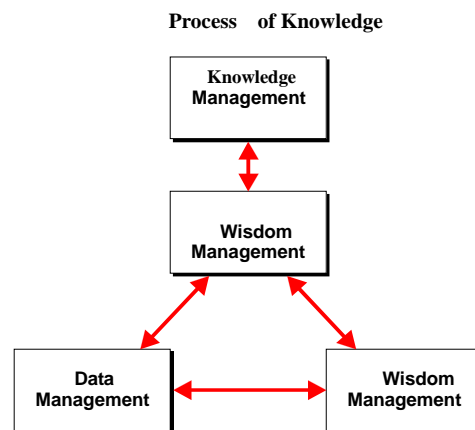


Figure 1

Today knowledge management is accepted as a decisive quality in most developed organizations. The know-how and expertise of the work-force is an important factor for the success of companies and strongly influences the effectiveness and efficiency of the business processes and their development. The concept of Knowledge Management (KM) receives high strategic consideration across multiple sectors. In the management area, KM is specifically relevant due to the knowledge of the the new product development process, which is especially interested in learning from the lessons of the past.(Thoben,2000)

The range of knowledge management activities is extensive, and touches many aspects of organization operations, for example (see figure 2) Creation of knowledge databanks – finding best tasks and expert directories, understanding market intelligence, Application of efficient and Effective information management systems for gathering, censoring, filtering, classifying and storing of information, Creation of knowledge into business processes e.g. through the use of

help screens in computer procedures or access to experts from icons.

Development of knowledge centers - focal points for knowledge skills and facilitating knowledge flow ,Reuse of knowledge at customer support centers e.g. via case-based reasoning, Usage of collaborative technologies, especially intranets or groupware, for rapid information access, Creation of Knowledge webs - networks of experts who collaborate across and beyond an organization's functional and geographic boundaries.(Skyrme,2000)



Figure 2 Range of Knowledge Management

Despite the rapid development of KM , most managers believe that much has still to be accomplished. A typical evolution of knowledge management within an organization goes through several phases.(skyrme,2000)

Informal: knowledge management is being practiced to some level in some parts of the organization (although it may not be recognized as such or called 'knowledge management') but formal knowledge management is recognized as a formal project or programme

Then is the time for expansion of the knowledge by using of knowledge management as a regulation grows in practice across different parts of the organization.

Also there is a degree of co-ordination of knowledge management activity; knowledge can be more easily shared across departmental boundaries by a good organizing.

Incorporated knowledge are formal standards and approaches that gives every employee access to most organizational knowledge through common interfaces And finally we can implant the KM. Knowledge management is part-and-parcel of any tasks; it blends impeccably into the background.(see figure 2)

KM Processes

The Knowledge of organization can develop in two primary ways: improve the processes of having knowledgeable people and develop the processes of sharing knowledge among them.(burlton,1998)

Individual knowledge is an skill improved with use, not

consumed when applied, nor lost when transferred, a vital challenge is to attract and retain knowledgeable and motivated personnel. These sentiments are often echoed in service based organizations yet when the state of the processes which are supposed to deliver these is examined we usually find fragmented conflicting practices at best. One way to start to deal with the challenge is to improve the processes which hire staff, align incentives with the business outcomes of value, recognize and payment, train, develop human potential, provide varied experience, and support staff to share experience. The same is generally true for acquiring knowledge from the outside through partnerships, hiring of consultants, research consortia etc. If these supposed enabling processes do not deliver appropriate enablers then knowledge will not translate to action. The objective is to enhance our ability to perform. Performing is a subsequent act.

On the other hand For creation corporate knowledge Organizational size is a major factor in KM programs. Size matters since the larger the organization, the more potential knowledge exists but at the same time the harder it is to identify its source and get access to it with a trust relationship among the potential collaborators. The development and application of knowledge must be relevant and in context to the business direction and the stakeholders needs. Optimum knowledge application, sharing, and flow is only delivered as part of the business processes of the organization. The objectives and methods of each must be common. Most importantly, knowledge growth and use must be specifically coupled to the individual and team objective setting, incentive and reward mechanisms of the task The development and application of knowledge must be relevant and in context to the business direction and the stakeholders needs. Optimum knowledge application, sharing, and flow is only delivered as part of the business processes of the organization. The objectives and measures of each must be common. Most importantly, knowledge growth and use must be specifically tied to the individual and team objective setting, incentive and reward mechanisms of the enterprise. The development and application of knowledge must be relevant and in context to the business direction and the stakeholders needs. Optimum knowledge application, sharing, and flow is only delivered as part of the business processes of the organization. The objectives and measures of each must be common. Most importantly, knowledge growth and use must be specifically tied to the individual and team objective setting, incentive and reward mechanisms of the enterprise. The development and application of knowledge must be relevant and in context to the business direction and the stakeholders needs. Optimum knowledge application, sharing, and flow is only delivered as part of the business processes of the organization. The objectives and measures of each must be common. Most importantly, knowledge growth and use must be specifically tied to the individual and team objective setting, incentive and reward mechanisms of the enterprise optimize the knowledge richness/ease of access dilemma.

In larger organizations, especially, process becomes critical and advanced process renewal aims to optimize knowledge flow for example time to market of new product ideas is a important factor in fast moving industries such as electronics, telecommunications and banking. This procedure must exploit knowledge effectively and efficiently and it must not drag or fail. Processes which embed knowledge in other processes or enablers are paramount. They must generate, collect, structure, store, and distribute and share or stagnation will set in. Collaborative workflow processes which require a well defined flow of activity from knowledge worker to knowledge worker must have well designed connective tissue. Collaborative workgroup processes which require shared research, design and development must have the mechanisms for ongoing sharing of interim and unproven results without professional fear or suspicion. Official and unofficial teams must have shared measures and incentives.

The processes and needs for good individual and corporate knowledge assume that a number of factors are in place which will ensure that the knowledge market operates successfully. Mainly, corporate knowledge requires individual knowledge, the mechanisms and opportunities for sharing, reasons for sharing and individual actions around knowledge to be driving towards the same solutions and outcomes as the business processes.

It is significant that all member of organizations understand what they know and don't know. They must also realize when they should collaborate and when they know enough to simply act. They must be aware of what knowledge exists and who has it or access to getting it. They must also understand why they are doing what they are and what makes an appropriate result.

All individuals must have the ability to identify and get connected to the sources of better knowledge when they need to collaborate or get help. They will require access to those who know in either personal and/or electronic forms. They will require the time availability and organizational authorization from all parties in the collaboration as well as their management. They will also require access to suitable repositories of best practices and guides through effective equipments.

Those involved with knowledge sharing or transfer must first have the personal dedication to improve their own knowledge. This may be through personal learning and training, learning on the job or exploiting opportunities provided through business programs. Whether buyers, sellers or brokers, they must sense openness to sharing with others. They must also truly believe that a trust culture is in place which will encourage communication and sharing rather than punish those who expose themselves. There must also be incentives and rewards to use or share knowledge which are in synch with the incentives and time availability of others. There must be a win-win view of support for all. They must want to share.

II. Application of KM Techniques

However, today's practice in KM still lacks from significant drawbacks and the existing knowledge is captured and capitalised only to a small degree. The reasons for this are manifold, and one of the most critical factors is time. Though many employees are willing to document and utilise existing knowledge, they do not have the time to do this in the pressure of day-to-day business life. Consequently, there is a strong need for methods and tools with utmost user friendliness for rapid Knowledge Management (Thoben, 2000)

In practice, knowledge management is the deployment of a set of tools and techniques that are used to help organizations manage the two knowledge cycles :Innovation cycles and knowledge sharing cycles .In innovation cycle we talk about creating ,codifying ,embedding and diffusing of the knowledge in the organization and in knowledge sharing cycle we focus on identifying, gathering, organizing ,sharing ,learning, applying and evaluating of knowledge in the organization.

In innovation cycle (see figure 3)in the first step we try to create and exist the knowledge by using creativity techniques of structured problem solving ,Creative abrasion: where people form different perspectives discuss ideas, business simulations and models to provide new insights as to how things works, Skilful dialogue to reveal assumptions and to surface new ideas and finally Morphological analysis which is a specific approach in which the functions of a product are described and new combinations or alternative sought.

In the second step we must codify the knowledge in our organization by Designing methods and disciplines which have formal approaches for design; these represent knowledge that was once tacit or ad-hoc and has now been systematized, often into computer-based applications. Many such applications have some core algorithms that embody design rules based on past experience. Also we can use PDM (Product Data Management) for storing information about components that go into a complex product (widely used in the aerospace industry).

These Methodologies are particularly relevant to process design or the deign of work activities; a methodology in the form of procures, guidelines and workbooks represents codification of good practice

In the third step we embed the koweledge by Prototyping: initial 'proof of concept' of new knowledge, it can also be the prototyping of computer applications or even documents, Packaging the knowledge which is made explicit and organized into some form of package, such as a document or a software

To embed knowledge into routine activities.

The final stage in this process is an effective marketting for promulgathing new knowledge especially throw E-marketting .(see figure 3)

In knowledge sharing Cycle ,the first step is identifying the knowledge by information audit which is a process of

identifying core knowledge needs ,Knowledge mapping for visual presentation of the structure of knowledge .text mining for identifying core concepts and finally conceptaul mapping for showing relationships between different entities.

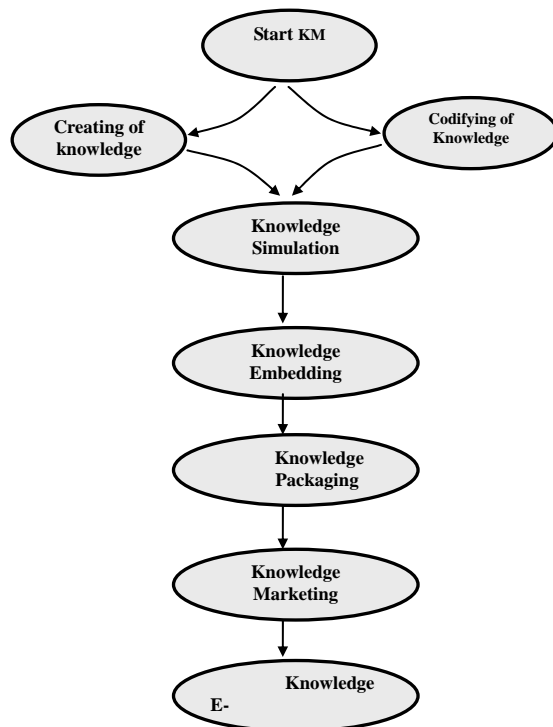


Figure 3 Innovation Cycle of KM

Now is the time for information gathring. We can gather the information by interviewing and also software that searches the internet

After organizing the information by data base systems we cab share the knowledge. For Knowledge sharing we need a knowledge management programme to connect knowledge providers with knowledge users and also to develop and share knowledge around a common vision or common problem. Also we need document management systems to formalize and share explicit knowledge around a key corpus of documents

By cross-functional teams we can also share the knowledge.Teams with people from different disciplines and organizational units; such teams are a good way of sharing knowledge – especially informal knowledge - across normal discipline or organizational boundaries.

Finally we can establish Knowledge centres like the corporate library; a knowledge centre will typically staffed by information scientists (librarians) who act as a conduit between the requester and suppliers of knowledge

In the applying stage we package knowledge by putting knowledge in a form that makes it more widely accessible and support our decision systems.In this process we can also use Case based reasoning (CBR)for

interpreting a situation based on analogues from the past or related situations. CBR is a particular type of artificial intelligence software.

And finally we must Evaluate the knowledge .for this purposes we need KM assessment which is an assessment of activities within a knowledge management programme, gauged against generally accepted good practice and also we need a formal approach for classifying intellectual capital into its components (typically human capital, customer capital, structural capital and intellectual property) and developing metrics to assess how it is changing over time.

At the end we need benchmarking to compare of a specific process with other organizations or units carrying out the same process.(see figure 4)

The above list is used to indicate the many ways in which knowledge management manifests itself within an organization. As the discipline of knowledge management becomes more established, each technique becomes better understood, documented and diffused. Many techniques have associated computer tools that make them easier to implement and diffuse through an organization.

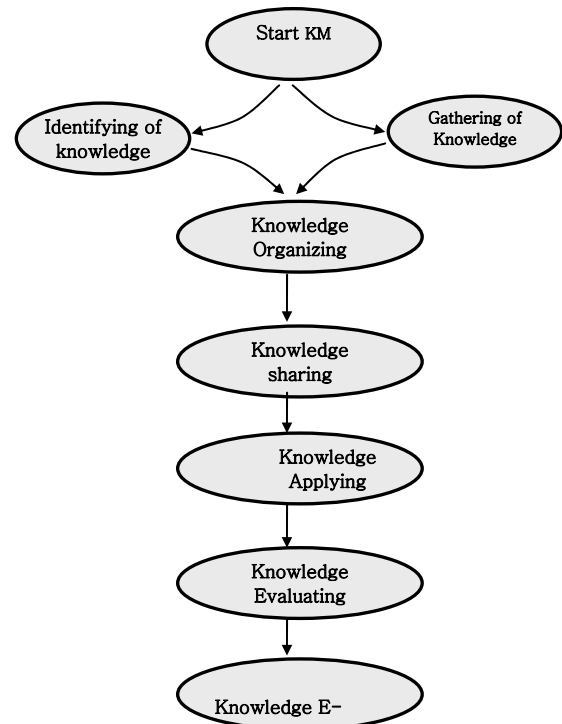


Figure 4 Knowledge Sharing Cycle

III. Conclusion

In fact, any task that uses and applies knowledge can benefit from the structure of knowledge management, and that covers most managerial and professional activities. Therefore, like other management ‘fads’ before, many existing business practices (such as information management and intelligence gathering) are coming under the knowledge

management umbrella. Similarly, information systems solutions, such as document management and data warehousing are being similarly relabeled.

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